In the Claims:

1-9. Cancelled

10. (Currently Amended) ~~The architecture of claim 1 further including~~ A network-centric service distribution architecture that integrates a wireless access service in a local Residential/Business Broadband Network (RBN) environment through the use of a local RBN to a service provider's broadband transport network and to a service provider's broadband packet network that facilitates end-to-end packet telecommunication services, wherein the RBN of the network-centric service distribution architecture comprises:

a Media Terminal Adapter, coupled to at least one access port (AP) and to the service provider's broadband transport network, for providing access functions for connecting the service provider's broadband packet network via the service provider's broadband transport network with the RBN, the at least one access port, coupled to the Media Terminal Adapter, arranged to receive and send wireless signals to a plurality of wireless RBN devices, supporting telephony interworking among TIA/EIA-316 handsets, EDGE/GRPS handsets and IEEE 802.11b devices;

a Network Server Platform (NSP), coupled to the service provider's broadband packet network, for controlling and administering operations and services of the access port and the plurality of wireless RBN devices associated therewith; and

a private branch exchange (PBX) coupled to the Media Terminal Adapter and, in turn, to the service provider's broadband transport network and to the service provider's broadband packet network for delivery of packet telecommunications services.

11. (Previously Presented) The architecture of claim 10 where there is at least one wired telephone connected to the PBX and a wireless telecommunication device communicating with the access port functions as a cordless extension of the wired telephone.

12. (Currently Amended) The architecture of claim 10 wherein the ~~private branch exchange~~ PBX is further coupled to a Public Switched Telephone Network (PSTN) for circuit-switched telecommunication services.

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13-23. Cancelled

24. (Currently Amended) ~~The architecture of claim 23~~ A network-centric service distribution architecture that integrates a wireless access service in a local Residential/Business Broadband Network (RBN) environment through the use of a local RBN to a service provider's broadband transport network and to a service provider's broadband packet network that facilitates end-to-end packet telecommunication services, wherein the RBN of the network-centric service distribution architecture comprises:

a Media Terminal Adapter, coupled to at least one access port (AP) and to the service provider's broadband transport network, for providing access functions for connecting the service provider's broadband packet network via the service provider's broadband transport network with the RBN, the at least one access port, coupled to the Media Terminal Adapter, arranged to receive and send wireless signals to a plurality of wireless RBN devices, supporting telephony interworking among TIA/EIA-316 handsets, EDGE/GRPS handsets and IEEE 802.11b devices, wherein the access port and the Media Terminal Adapter are integrated into a single unit to provide functions of the access port and the Media Terminal Adapter, and wherein the Media Terminal Adapter (MTA) is integrated with one of a cable and an xDSL modem, to form a single unit, wherein said single unit digitally encodes a multimedia signal to form an encoded signal, encapsulates the encoded signal in IP packets, and delivers the IP packets to the service provider's broadband packet network via the service provider's broadband transport network via one of the cable and the xDSL modem; and

a Network Server Platform (NSP), coupled to the service provider's broadband packet network, for controlling and administering operations and services of the access port and the plurality of wireless RBN devices associated therewith.

25. (Original) The architecture of claim 24, wherein said single unit provides voice transcoding.

26. (Original) The architecture of claim 24, wherein said multimedia signal is an analog signal.

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27. (Original) The architecture of claim 24, wherein said multimedia signal is a digital signal.

28. (Original) The architecture of claim 24 wherein the MTA maintains a call state for each active telephone line and participates in call signaling and telephony feature implementation.

29. (Cancelled)

30. (Currently Amended) The architecture of claim [[29]] 24 wherein one of the cable and the xDSL modem receives IP packets from one of the Media Terminal Adapter and a personal computer and packages and sends packaged IP packets through the service provider's broadband transport network using one of a cable interface and an xDSL interface.

31-35. Cancelled

36. (Currently Amended) ~~The architecture of claim 34~~ A network-centric service distribution architecture that integrates a wireless access service in a local Residential/Business Broadband Network (RBN) environment through the use of a local RBN to a service provider's broadband transport network and to a service provider's broadband packet network that facilitates end-to-end packet telecommunication services, wherein the RBN of the network-centric service distribution architecture comprises:

a Media Terminal Adapter, coupled to at least one access port (AP) and to the service provider's broadband transport network, for providing access functions for connecting the service provider's broadband packet network via the service provider's broadband transport network with the RBN, the at least one access port, coupled to the Media Terminal Adapter, arranged to receive and send wireless signals to a plurality of wireless RBN devices, supporting telephony interworking among TIA/EIA-316 handsets, EDGE/GRPS handsets and IEEE 802.11b devices, wherein the access port supports at

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least one of a standardized air interface used for analog, digital, circuit, and packet communication to narrowband and broadband wireless devices, computing-telephony resources, and appliances, and wherein a communication link between the access port and the wireless RBN devices distributes call features and related operation, administration, maintenance and provisioning instructions via the Media Terminal Adapter, one of a hybrid fiber coaxial cable and a xDSL connection of the service provider's broadband packet network, and the service provider's broadband transport network to the RBN; and

a Network Server Platform (NSP), coupled to the service provider's broadband packet network, for controlling and administering operations and services of the access port and the plurality of wireless RBN devices associated therewith.

37. (Currently Amended) ~~The architecture of claim 34~~ A network-centric service distribution architecture that integrates a wireless access service in a local Residential/Business Broadband Network (RBN) environment through the use of a local RBN to a service provider's broadband transport network and to a service provider's broadband packet network that facilitates end-to-end packet telecommunication services, wherein the RBN of the network-centric service distribution architecture comprises:

a Media Terminal Adapter, coupled to at least one access port (AP) and to the service provider's broadband transport network, for providing access functions for connecting the service provider's broadband packet network via the service provider's broadband transport network with the RBN, the at least one access port, coupled to the Media Terminal Adapter, arranged to receive and send wireless signals to a plurality of wireless RBN devices, supporting telephony interworking among TIA/EIA-316 handsets, EDGE/GRPS handsets and IEEE 802.11b devices, wherein the access port supports at least one of a standardized air interface used for analog, digital, circuit, and packet communication to narrowband and broadband wireless devices, computing-telephony resources, and appliances; and

a Network Server Platform (NSP), coupled to the service provider's broadband packet network, for controlling and administering operations and services of the access port and the plurality of wireless RBN devices associated therewith, wherein a feature set and current state of all wireless Virtual Private Network-participating instruments is

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exchanged between all VPN terminations, followed by configuration of all wireless instruments to synchronize feature availability, appearance, and state.

38. (Previously Presented) A wireless access port (AP) apparatus for communicating with a network-centric service distribution architecture that supports RF protocols comprises:

a wireless radio, wherein said wireless radio supports wireless voice and data communication with wireless handsets;

a digital-to-analog converter (DAC) coupled to said wireless radio;

an analog-to-digital converter (ADC) coupled to said wireless radio;

a quad upconverter coupled to said DAC;

a quad downconverter coupled to said ADC;

a plurality of digital signal processors (DSPs) coupled to said quad upconverter and said quad downconverter;

a main processing unit coupled to said plurality of DSPs, said main processing unit further comprising memory; and

a timing and control unit coupled to said main processing unit for setting timing and control for radios, DSPs and for all elements of said AP.

39. (Original) The apparatus according to claim 38, wherein said main processing unit further comprises:

a PCMCIA slot; and

a wireless modem coupled to said PCMCIA slot, wherein said wireless modem supports voice and entertainment distribution.

40. (Original) The apparatus according to claim 38, wherein said main processing unit further comprises:

a Voice over Internet Protocol (VOIP)/ Ethernet processor for supporting data and IP telephony data, wherein said VOIP/Ethernet processor is coupled to memory; and

at least one 10/100 Mbit Ethernet PHY chip coupled to said VOIP/Ethernet processor, wherein said 10/100 Mbit Ethernet PHY chip performs analog modulation and

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demodulation function necessary to connect MAC functions within said VOIP/Ethernet processor to an attached Ethernet device.

41. (Original) The apparatus according to claim 39, wherein said main processing unit further comprises:

a Voice over Internet Protocol (VOIP)/ Ethernet processor for supporting data and IP telephony data, wherein said VOIP/Ethernet processor is coupled to memory; and

at least one 10/100 Mbit Ethernet PHY chip coupled to said VOIP/Ethernet processor, wherein said 10/100 Mbit Ethernet PHY chip performs analog modulation and demodulation functions necessary to connect MAC functions within said VOIP/Ethernet processor to an attached Ethernet device.

42. (Original) A Media Terminal Adapter (MTA) for communicating with a network-centric service distribution architecture via a broadband transport interface, wherein a service provider's broadband packet network distributes services to end devices via said MTA coupled to an access port (AP), wherein said MTA comprises:

a plurality of tip/ring control units for interfacing with analog telephone sets;

a plurality of dual SLIC circuits coupled to said tip/ring control units, wherein said dual SLICs provide connectivity to legacy analog telephone sets;

a Voice over Internet Protocol (VOIP)/Ethernet processor coupled to said plurality of dual SLICs, wherein said VOIP/Ethernet processor further comprises memory;

a main processing unit coupled to said VOIP/Ethernet processor, wherein said main processing unit further comprises memory;

a broadband transport interface coupled to said main processing unit;

a 10/100 Mbit Ethernet PHY chip coupled to said VOIP/Ethernet processor, wherein said 10/100 Mbit Ethernet PHY chip performs analog modulation and demodulation functions necessary to connect MAC functions within said VOIP/Ethernet processor to an attached Ethernet device; and

a timing and control unit coupled to said main processing unit for setting timing and control for protocols and for all elements of said MTA.

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43. (Currently Amended) An Intelligent Broadband Access Point (IBAP) apparatus for communicating with a network-centric service distribution architecture via a broadband transport interface, wherein a service provider's broadband packet network distributes services to end devices via said IBAP and wherein said IBAP comprises:

a ~~wideband~~ wireless radio, wherein said wireless radio supports wireless voice and data communication with wireless handsets;

a digital-to-analog converter (DAC) coupled to said wireless radio;

an analog-to-digital converter (ADC) coupled to said wireless radio;

a quad upconverter coupled to said DAC;

a quad downconverter coupled to said ADC;

a plurality of digital signal processors (DSPs) coupled to said quad upconverter and said quad downconverter;

a main processing unit coupled to said plurality of DSPs, said main processing unit further comprising memory;

a plurality of tip/ring control units for interfacing with analog telephone sets;

a plurality of dual SLIC circuits coupled to said tip/ring control units, wherein said dual SLICs provide connectivity to legacy analog telephone sets;

a Voice over Internet Protocol (VOIP)/Ethernet processor coupled to said plurality of dual SLICs, wherein said VOIP/Ethernet processor further comprises memory, further wherein said VOIP/Ethernet processor is coupled to said main processing unit;

a broadband transport interface coupled to said main processing unit;

a 10/100 Mbit Ethernet PHY chip coupled to said VOIP/Ethernet processor, wherein said 10/100 Mbit Ethernet PHY chip performs analog modulation and demodulation functions necessary to connect MAC functions within said VOIP/Ethernet processor to an attached Ethernet device; and

a timing and control unit coupled to said main processing unit for setting timing and control for radios, DSPs and for all elements of said IBAP, wherein said timing and control unit further provides control for all elements of said IBAP.

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44. (Original) The apparatus according to claim 43, wherein said main processing unit further comprises:

a PCMCIA slot; and

a wireless modem coupled to said PCMCIA slot, wherein said wireless modem supports voice and entertainment distribution.

45. Cancelled.

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